



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,902	12/20/2000	Michelle A. Miller	TI-31034	8958

23494 7590 05/06/2003

TEXAS INSTRUMENTS INCORPORATED
P O BOX 655474, M/S 3999
DALLAS, TX 75265

EXAMINER

HAVAN, THU THAO

ART UNIT	PAPER NUMBER
----------	--------------

2672

DATE MAILED: 05/06/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

TD

Office Action Summary

Application No.

09/742,902

Applicant(s)

MILLER ET AL.

Examiner

Thu-Thao Havan

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Claims **1-22** are pending in the present application.
2. Applicant's arguments filed February 19, 2003 have been fully considered but they are not persuasive. As addressed below, Tanaka teaches the claimed limitations.

Tanaka teaches the step of allowing the user to jump the cursor between intersection points with a single key command on the points of interest display screen (col. 9, line 39 to col. 10, line 57; figs. 2, 8, and 9a-9e). In other words, Tanaka teaches in figures 9a-9e that when the cursor keys 12i are sequentially operated, the cursor k on the screen is moved (i.e. jump) rightward and upward. Furthermore, when the Enter key is operated in the state where the cursor k on the graph display screen is moved to a first cursor position. Thus, the user's interaction with an Enter key makes the cursor moves (jumps) to another point of interest display on the screen.

In addition, Tanaka teaches the step of storing the location of the cursor at desired points with a store command that comprises a single key stroke (col. 9, lines 1-14; col. 1, line 52 to col. 2, line 11; figs. 8 and 9a-9e). In figures 9a to 9e, Tanaka teaches the key operations involved in the coordinate data boxing process performed by the computer. In that the coordinate range data storing means for storing the coordinate range data and color data input by the coordinate range data inputting means in corresponding relationship.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims **1-22** are rejected under 35 U.S.C. 102(e) as being unpatentable by Tanaka et al. (US patent no. 5,907,317).

Re claims **1, 8, and 15**, Tanaka discloses a graphing calculator having a points of interest user interface (col. 1, lines 12-25) comprising: a screen capable of displaying at least straight lines in any direction and a cursor (col. 4, lines 26-53; figs. 4 and 5g); a key panel having keys at least capable of selecting positions of cursor and moving cursor horizontally or vertically on screen (col. 5, line 43 to col. 6, line 11; fig. 1); a processor for executing programming (fig. 1) that provides a point of interest user interface having the following steps: a) providing an input display to allow the user to define a plurality of equations, inequalities and vertical lines (col. 5, lines 43-49), b) graph the defined equations, inequalities and vertical lines (fig. 4 and 5g), c) provide a points of interest display screen, and d) allow the user to jump the cursor between intersection points with a single key command on the points of interest display screen (col. 9, line 39 to col. 10, line 57).

Re claims **2 and 16**, Tanaka teaches store the location of the cursor at desired points with a store command that comprises a single key stroke (col. 9, lines 1-14; figs.

9a-9e). In figure 9a to 9e, Tanaka teaches the key operations involved in the coordinate data boxing process performed by the computer.

Re claims **3, 9, and 17**, Tanaka teaches display the stored points of interest and use the stored points of interest for other calculator functions (col. 5, lines 27-30; col. 1, lines 5-10).

Re claims **4, 10, and 18**, Tanaka teaches input equations, inequalities and lines using a Y=Editor and an X=Editor (col. 6, line 39 to col. 7, line 18).

Re claim **5**, Tanaka teaches an indication on the display of the current coordinates of the cursor (col. 8, lines 7-59). The current coordinates of the cursor are in black and the user can change it to different color code.

Re claims **6-7, 11-12, and 19-20**, Tanaka teaches an indication on the display of which equation, inequality or vertical lines contributed to the point of interest indicated at the cursor location includes the intersection symbol for equations that include the line and does not use the intersection symbol for strict inequalities (figs. 5a to 8). In figure 8, Tanaka teaches the stored cursor position to graph the color-coded coordinates.

Re claims **13 and 21**, Tanaka teaches an algorithm to computer intersection points using a numerical root-finder which uses XMIN and XMAN for the graph window as the upper and lower bounds on the solution and the initial guess taken as the current cursor position (col. 4, line 26 to col. 6).

Re claims **14 and 22**, Tanaka teaches ...the Simplex algorithm (figs. 5a-5g).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Inquiries

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu-Thao Havan whose telephone number is (703) 308-7062. The examiner can normally be reached on Monday to Thursday from 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (703) 305-4713.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

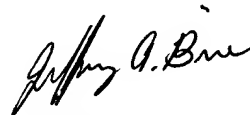
Art Unit: 2672

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Thu-Thao Havan
April 28, 2003


JEFFERY BRIER
PRIMARY EXAMINER